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KELLOGG, HUBER, HANSEN, TODD & EVANS, P.L.L.C.

SUMNER SQUARE

1615 M STREET, N.W.

SUITE 400

WASHINGTON, D.C. 20036-3209

(202) 326-7900

FACSIMILE:

(202) 326-7999

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

March 6, 2002

**VIA HAND DELIVERY**

**EX PARTE**

William F. Caton  
Acting Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

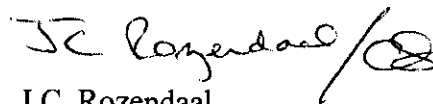
**Re: Notification of Ex Parte Communication in ET Docket 98-206, RM-9147; RM-9245; Applications of Broadwave USA et al., PDC Broadband Corporation, and Satellite Receivers, Ltd., to provide a fixed service in the 12.2-12.7 GHz Band; Requests of Broadwave USA et al. (DA 99-494), PDC Broadband Corporation (DA 00-1841), and Satellite Receivers, Ltd. (DA 00-2134) for Waiver of Part 101 Rules.**

Dear Mr. Caton:

I write on behalf of Northpoint Technology, Ltd. to inform you that on February 28, 2002, the attached documents were faxed to Carolyn Conyers, Commissioner Copps' assistant, at Ms. Conyer's request.

Eighteen copies of this letter and its attachments are enclosed – two for inclusion in each of the above-referenced files. Please contact me if you have any questions.

Yours sincerely,



J.C. Rozendaal

*Counsel for Northpoint Technology, Ltd.*

cc: Carolyn Conyers

attachments

Number of Copies rec'd 0718  
DATE CODE

444 North Capitol St., N.W., Suite 645, Washington, DC 20001  
(202) 737-5711  
(202) 737-8030 Fax

**Broadwave USA and  
Northpoint  
Technology**

# Fax

**To:** Carolyn Conyers

**From:** Linda Rickman

Office of Commissioner Copps

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**Fax:** 202-418-2802

**Pages:** 12 (includes cover)

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**Phone:**

**Date:** February 28, 2002

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**Re:**

**CC:**

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☐ **Urgent**    ☐ **For Review**    ☐ **Please Comment**    ☐ **Please Reply**    ☐ **Please Recycle**

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• **Comments:**

**Per your inquiry and request today, I have attached a complete set of documents the Commissioner received regarding Northpoint Technology. Please be advised that these documents were not submitted by Northpoint Technology in any of our previous ex parte filings. We are nonetheless pleased to provide a completed set.**

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# **Northpoint Will Bring Low Cost High-Speed Internet Access To Rural And Low Income Residents**

## **Needs and Barriers**

- **“High cost” and low-income communities generally do not have affordable broadband Internet access.** Only 20.3% low-income rural residents have Internet access. This is 20% below the national average. Only 7.3% of rural households have broadband connections compared to central cities (12.2.%) and urban areas (11.8%).
- High-speed Internet access provides opportunities such as employment, training, education, health care, business, and civic participation. These opportunities may be unavailable in rural and low-income communities simply because of high infrastructure costs associated with the two broadband access technologies on the market today, cable and DSL
- Today, **even most high-income consumers have no more than two choices for high-speed service:** cable modems and digital subscriber lines (DSL).

## **Northpoint’s Alternative Internet Access Technology**

- Northpoint will provide **broadband wireless Internet access and high-speed data transmissions** (in addition to video programming) at \$20/month irrespective of geographical location.
- Low infrastructure costs make Northpoint a **low cost alternative** for sparsely populated regions that currently have NO broadband access and for low-income communities that do not currently have affordable access.
- Entry by Northpoint could considerably speed the “race for bandwidth.”<sup>1</sup> Broadwave and its affiliates have filed for licenses in all 210 Designated Market Areas (DMA) in the nation. That means **every rural area will be served by a Northpoint affiliate.**

## **Benefits of Broadband Internet Access in Rural & Underserved Areas**

- **Education:** Broadband Internet allows for revolutionary opportunities in distance learning, including educational and training programs for adult learners. Adults in isolated communities can take college courses at home online, children can participate in educational enrichment programs, and employers can train workers located anywhere in the world.

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<sup>1</sup> Thomas Hazlett’s Comments Filed before the Federal Communications Commission, ET Docket No. 98-206

- **Health Care:** Broadband Internet-based telemedicine and e-health initiatives are dramatically changing health care provision in rural communities. Health professionals can consult experts and engage in online professional development opportunities previously available only in wealthy and urban areas.
- **Economic Development:** Broadband Internet access allows for new economic development opportunities in rural areas, expanding markets for local businesses, and permitting physically isolated businesses to find a wide range of suppliers for business services and materials.

### Comments Filed In Support of Northpoint<sup>2</sup>

- Joint Comments of Consumers Union, Leadership Council on Civil Rights, Center for Media Education, The League of United Latin American Citizens and the Media Access Project:

“Approval of Northpoint’s application would go a long way towards repairing this **broadband divide**. Northpoint’s technology can provide broadband service in even the most remote areas, and its lower cost is almost certain to make broadband access more affordable.”

- National Indian Telecommunication Institute (NITI):

“NITI supports the development and use of emerging technologies on tribal lands to provide American Indian, Native Hawaiian, and Alaskan Native communities with important **educational tools and equal economic and cultural development opportunities and a strong voice in self determination** ... Broadwave is the best available means of closing the digital divide burdening Americans living on tribal lands and low income areas.”

- Thomas W. Hazlett, former Chief Economist at the FCC:

“As a first approximation, one can conservatively assume that the emergence of this third major national platform will lower high-speed access charges by an average of 10% nationwide. Given current residential subscribership of about 5 million and average monthly fees of \$40,<sup>3</sup> [Northpoint’s service] would produce **yearly customer savings of about \$250 million.**”

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<sup>2</sup> Comments filed before the Federal Communications Commission, ET Docket No. 98-206

<sup>3</sup> *Precursor Watch: Broadband Deployment Outlook* (Feb. 22, 2001).

## **Why the FCC's Proposed Auctioning of the 12.2-12.7 GHz Spectrum is Against the Public Interest**

Northpoint Technology, Ltd. ("Northpoint") has invented and patented an innovative wireless technology that enables terrestrial use of the 12.2-12.7 GHz satellite spectrum. Northpoint's technology creates new bandwidth by re-using the spectrum previously allocated to existing Direct Broadcast Satellite ("DBS") operators without causing harmful interference. Utilizing a series of low-power repeaters mounted on buildings, existing towers, and hilltops, Northpoint will deploy inexpensive cable, local broadcast television and Internet access nationwide, and will bring local and broadband services to currently unserved and underserved rural areas.

In January 1999, Northpoint and 8 Non-Geostationary Satellite Orbit Fixed Satellite Service ("NGSO-FSS") systems applied to share the DBS spectrum. In 2000, the FCC concluded that all 9 applicants can share the spectrum with DBS. However, the 8 satellite applicants succeeded in getting legislation passed that exempts their applications from an auction. Northpoint seeks parity in licensing with those satellite companies, who filed applications on the same day for the same spectrum.

### **What's at Stake**

An FCC auction of the terrestrial use of satellite spectrum would negatively impact consumers in a variety of ways:

- An auction would delay delivery of both broadband services and local broadcast signals to rural users and inhibit the emergence of new competitive alternatives to cable and satellite. Northpoint is prepared to begin service immediately, and has pledged to carry all local television stations (1100 local stations are not carried by satellite), and has offered to accept a tight build out schedule (two years to initiate broadband and local service in all markets.)
  - Consumer groups say Northpoint "will bring instant competition and rapid deployment of broadband services to the entire country," and caution, "auctions would delay and possibly undermine the expansion of competition to incumbent cable and satellite companies."
  - The National Association of Broadcasters and well over 100 individual station owners similarly oppose an auction and endorse Northpoint for the competition it would bring to the marketplace and for its carriage of all local television and emergency broadcast stations.
- Thus far, auctions have failed to foster cable competition. Cable prices have risen 37% while Northpoint has been seeking FCC approval. Auctions have not



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fostered service outside of the largest markets. Only 31% of licenses offered for sale in 2001 were sold, primarily in large markets. 69% of licenses were unsold. ***Rural areas remain unserved.*** Northpoint could provide immediate price competition where it is currently lacking.

- An auction would force Northpoint to compete for the right to use its own patented innovation against deep-pocketed companies, thereby driving up the cost of broadband services to consumers. Because Northpoint is the only applicant that has a proven technology (no one else has passed the testing requirements), granting a license to any other company would obliterate any beneficial use of this spectrum for providing needed services to consumers.

### **An Auction of the Satellite Spectrum is Inappropriate**

The circumstances surrounding Northpoint's application for a waiver to provide terrestrial services in the satellite spectrum differ significantly from those that generally predicate an auction. Indeed, the FCC grants the majority of licenses (approximately 61%) for ground based services without auction. In the 12 GHz spectrum, 98.1% of all spectrum licenses have been issued without an auction.

- *Northpoint is presently treated different from the eight other applicants.* Northpoint has shown that its technology can share the satellite spectrum with the eight other satellite applicants. Notably, none of these eight applicants are being subjected to an auction.
  - On August 2, 2001, the FCC awarded 66,000 MHz of spectrum in the Ka band without an auction to 11 satellite companies, including DirecTV and EchoStar.
  - DirecTV has never participated in a spectrum auction.
  - To date, the FCC has granted 28 nationwide licenses without auction in the Ka band to DBS operators, including 8 nationwide licenses to Hughes (the largest DBS operator), and 5 nationwide licenses to Pegasus (DirecTV's largest affiliate).

- Auctioning the spectrum would involve an arbitrary and unconscionable change in the FCC’s management of the 12 GHz band. Since 1999, Northpoint has been negotiating with the FCC’s International Bureau in conjunction with the other satellite applicants to develop the technology to share the satellite spectrum. Now that Northpoint has satisfied all the established criteria, its applications should be processed without an auction along with the eight other applicants for services in the 12 GHz band.
- In 2000, Congress passed the Open-Market Reorganization for the Betterment of International Telecommunications (“ORBIT”) Act to promote competition in the satellite industry, which prohibits the FCC from auctioning “spectrum used for the provision of international or global communications services.” In order to prevent satellite providers from having an advantage over any *bona fide* terrestrial competitors, the ORBIT Act prohibition on auctioning spectrum should be extended to encompass terrestrial services that share satellite spectrum.
- *Northpoint’s innovative technology merely permits a new, shared use of already licensed spectrum.* Traditionally, the FCC conducts auctions when it makes new, previously unoccupied or underused spectrum available for licensing. In past auctions, the applicants have been indistinguishable, using nearly identical, widely available or non-proprietary technology. Northpoint, however, is the only qualified applicant to submit a timely application to provide **terrestrial** Multichannel Video Programming Distribution service, and is not seeking a license for new or underused spectrum. In contrast to these other applicants, Northpoint seeks a waiver to use its innovative and proprietary technology to expand the utility of previously licensed spectrum. Northpoint is the only applicant that submitted its technology for the congressionally mandated independent demonstration of spectrum sharing capability.
- *Congress has directed the FCC to validate and authorize spectrum-expanding technologies.* Congress has established three statutory deadlines intended to advance innovative technologies such as Northpoint’s. Specifically, the Communications Act orders the FCC to act on petitions that propose new technologies within one year, the Rural Local Broadcast Signal Act, directs the FCC to take actions by November 29, 2000 to promote facilities that will use spectrum previously allocated for other commercial use to deliver local broadcast signals to satellite television subscribers, and the Satellite Home Viewer Improvement Act (“SHVIA”) obligates satellite providers, upon request, to carry the signals of all local television broadcast stations, and also directs the FCC to act on applications for alternate technologies to serve these markets by November 29, 2000. The FCC has failed to comply with the Congressional deadlines, and

instead proposes further delay by auctioning the spectrum. Northpoint's technology is exactly the type of technology targeted by these initiatives.

- *The FCC has significant discretion in determining whether to auction spectrum.* The FCC may conduct an auction only if it accepts "mutually exclusive applications" for any "initial license or construction permit." The statute is explicitly clear that its provisions do not bar the FCC "from awarding licenses to those persons who make significant contributions to the development of a new telecommunications service or technology." Additionally, an auction may only be initiated if it is consistent with the FCC's obligation to "use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in application and licensing proceedings." In determining whether to accept mutually exclusive applications and initiate an auction, the FCC must act to promote the "rapid deployment of new technologies, products, and services for the benefit of the public, including those in rural areas, without administrative or judicial delays . . . economic opportunity and competition . . . [and] efficient and intensive use of the electromagnetic spectrum . . ." 47 USC § 309(j). The FCC has widely exercised its discretion and licensed more than 11,000 wireless applications without auction, including:

- Extending the MMDS licenses for analog cellular telephony first to include digital cellular telephony and then to permit two-way transmission. The FCC expanded this license without imposing any new fees.
- Authorizing the use of FM subchannels for paging and other services.
- Permitting Nextel to build a national wireless network using spectrum previously used for taxi dispatching.

• *Auctioning the spectrum would be a deterrent to future innovative proposals to expand the use of the limited amount of existing spectrum.* The FCC should encourage the development of technology that enhances or expands the usability of bandwidth within existing licensed bands. Defining each bandwidth expanding technology as a new service using new spectrum that must be auctioned off eliminates business incentives to develop the technology. No other company can lawfully use Northpoint's patented technology to provide these terrestrial services. Consequently, an auction of this spectrum is tantamount to a sale of the right to use Northpoint's patented technology. Such an auction would necessarily appropriate much of the value of the technology to the United States Treasury, and thus rises to an unconstitutional taking.



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# **Northpoint Provides Access to the Emergency Alert System that DBS Doesn't**

## **The Emergency Alert System Provides the Nation with Immediate Information**

- The Emergency Alert System (EAS) uses a locally broadcast radio signal to preempt a broadcast station or "cable" channel so that the President and local officials can transmit emergency messages to the public within 10 minutes.
- The EAS allows the sending and receiving of emergency information quickly and automatically and can operate unattended at the point of reception. The digital message can also be automatically converted into any language used by the broadcast or cable system.
- Since January 1, 1997, all radio and television broadcast stations have been using EAS, and a year later they were joined by all cable providers with more than 10,000 subscribers.

## **DBS Operators Do Not Provide EAS to Their Subscribers**

- Subscribers to DBS service do not receive EAS warnings, unless they happen to be watching a local broadcast channel in one of the markets in which DBS provides local channels.
- Even in these "served" markets, DBS subscribers who are watching a non-broadcast station will not get an EAS warning. DBS subscribers in the 80% of local television markets that are unserved with local channels will never get an EAS warning.
- DBS systems are simply not designed to receive government EAS alerts. Unlike a local cable system or local broadcast station, a national-oriented DBS operator will not receive the locally-broadcast government radio transmissions which trigger the EAS system preemptions.
- This means that 15+ million satellite television homes in the United States are without ready access to the Emergency Alert System. This leaves residents of rural states such as Wyoming, Montana and Vermont, where significant percentages of the populations are DBS subscribers, without access to the vital information that can EAS provide to the nation.

## **Northpoint/Broadwave Can Extend the Reach of the EAS**

- Northpoint's locally-deployed terrestrial systems will carry all EAS warnings, much like a local cable system.
- Northpoint systems can operate in full competition to DBS, or complement DBS service with a supplemental local channel offering. In this latter configuration, can preempt DBS non-broadcast channels with EAS warnings.

## **Northpoint Technology/Broadwave USA Will Dramatically Increase Minority Media Ownership**

“The kind of infusion of minority and female participation in media ownership and operation that Northpoint would provide is especially critical at this point in time.”  
(Consumers Union, Leadership Council on Civil Rights, Center for Media Education, The League of United Latin American Citizens and the Media Access Project, Reply Joint Comments p. 18)

In a highly concentrated broadcast industry where the top three cable operators enjoy approximately 50% of the market share, and two Direct Broadcast Satellite providers are about to merge, the entrance of Broadwave offers ownership diversity.

Broadwave is a new high quality, digital multi-channel video and high-speed Internet service based on Northpoint technology, an innovative patented wireless system that operates on a small, currently underutilized portion of the radio spectrum. Northpoint technology uses a ground-based system that broadcasts on the same frequencies as DBS satellites, without interference. It would allow consumers regardless of where they live to view local television stations over the same dish they use to receive video programming and Internet access. This is significant because, after being in operation for more than a decade, DBS presently carries only a quarter of the local stations in the country.

Broadwave and its network of affiliates are committed to building a diverse local ownership model. Access to the media by the broadest section of society as possible is essential to ensure that viewpoints are diverse and that all sectors of society are accurately depicted. Studies have shown that minority owned and managed stations lead to considerably more minority oriented content, greater attention to community concerns, and greater employment opportunities for minorities and women.

Northpoint's technology is licensed to 68 affiliate operators in local markets across the country. Women and minorities constitute 80% of all participants. Of the minorities represented in the Broadwave affiliates, 38% are African Americans, 8% are Latinos, 4% are Asian Americans and 3.4% are Native Americans. Women represent 32% of the affiliates. Women and minorities would control or have substantial equity participation in the majority of the nation's top media markets including nine of the top 10 markets and 18 of the top 20 markets through ownership of Broadwave affiliates.

These numbers find few parallels in a highly concentrated media industry in which mergers and consolidation have all but eliminated minority ownership. Consolidation creates higher barriers to entry for minorities who generally do not have access to the kind of capital necessary to compete with large conglomerates. With recent announcements of further mergers in the cable (AT&T Broadband/Comcast) and satellite (EchoStar/DirecTV) industries, markets may be further consolidated and chances for minority ownership rendered a nullity.



Not surprisingly, although minorities represent more than a quarter of the nation's population, they own just 23, or 1.9% of the 1288 licensed broadcast television stations operating in the United States. This is six fewer minority owned stations than in 1990. The total number of licensed broadcast television owners also decreased from 16 to 12 between 1998 and 2000. Consolidation in radio has also resulted in a dramatic reduction in women and minority owners.

How did we arrive at this state of affairs? The Federal Communications Commission (FCC) and Congress have traditionally favored policies that encourage competition and ownership diversity. But since passage of the 1996 Telecommunications Act, we have witnessed more media concentration rather than openness and competition. At the same time, the courts have struck down some FCC rules aimed at increasing diversity, and the FCC itself is poised to eliminate many remaining ownership rules.

Although the FCC has found that Northpoint's technology works and will not interfere with others in the DBS band (12.2-12.7 GHz), it has yet to license the technology. Instead at the urging of telecommunication entities, principally of satellite operators, it is considering auctioning the use of the spectrum to the highest bidder. If that occurs, it may write an end to Northpoint/Broadwave's innovative technology and business plan. If the FCC were to pursue an auction, it would delay introduction of this new service for years and increase the cost to consumers. What is worse, Northpoint, a start-up with limited resources, would be forced to compete with deep-pocketed competitors for use of the spectrum.

Numerous civil rights organizations including the Leadership Council on Civil Rights, the National Association of Minority Broadcasters, and The League of United Latin American Citizens have urged the FCC to license Northpoint immediately so that it can begin operating in local markets across the nation. As per their comments:

"... [Northpoint's service] will vastly increase the numbers of women and minorities participating in media ownership and employment, bringing with it the benefits of editorial diversity, economic empowerment and service to the underserved communities that Congress and the Commission have long sought to promote." (CU et al Reply Comments, p. 12)

The challenge now is to build awareness around the importance of licensing Northpoint's Broadwave affiliates immediately. If the FCC fails to do so, it will deprive millions of Americans of low cost access to video and high speed Internet services and destroy a bright hope for minority ownership.

## **Northpoint Technology Benefits Native Americans**

*NITI (National Indian Telecommunications Institute) is convinced that Northpoint's technology will help close the digital divide by enabling the Broadwave affiliates to offer high-bandwidth Internet access services in addition to video and audio programming. Northpoint's low-cost digital wireless system would offer many Native Americans their first opportunity for broadband access to the Internet.*

*National Indian Telecommunications Institute, Comments to the FCC*

### **The Problem: High Cost & Limited Access**

A report issued by the National Congress of American Indians in October 2001, "Connecting Indian Country: Tribally-Driven Telecommunications Policy," discussed discouraging statistics about computer and Internet access penetration in Native American households, especially those in rural areas. Among the findings discussed:

- Only between 8-19% of Native American rural households had Internet access.
- Only 22% of Native American households subscribe to cable television services.
- Only 20-70% of Native American reservation households have basic telephone services.

A report released by the Federal Communications Commission in August 2000, The "Deployment of Advanced Telecommunications Capability: Second Report," indicated that most Indian tribal lands lack access to broadband Internet services. According to the report, only 44% of zip codes associated with tribal territories included a subscriber to high-speed Internet access services, compared with a national average of 59%.

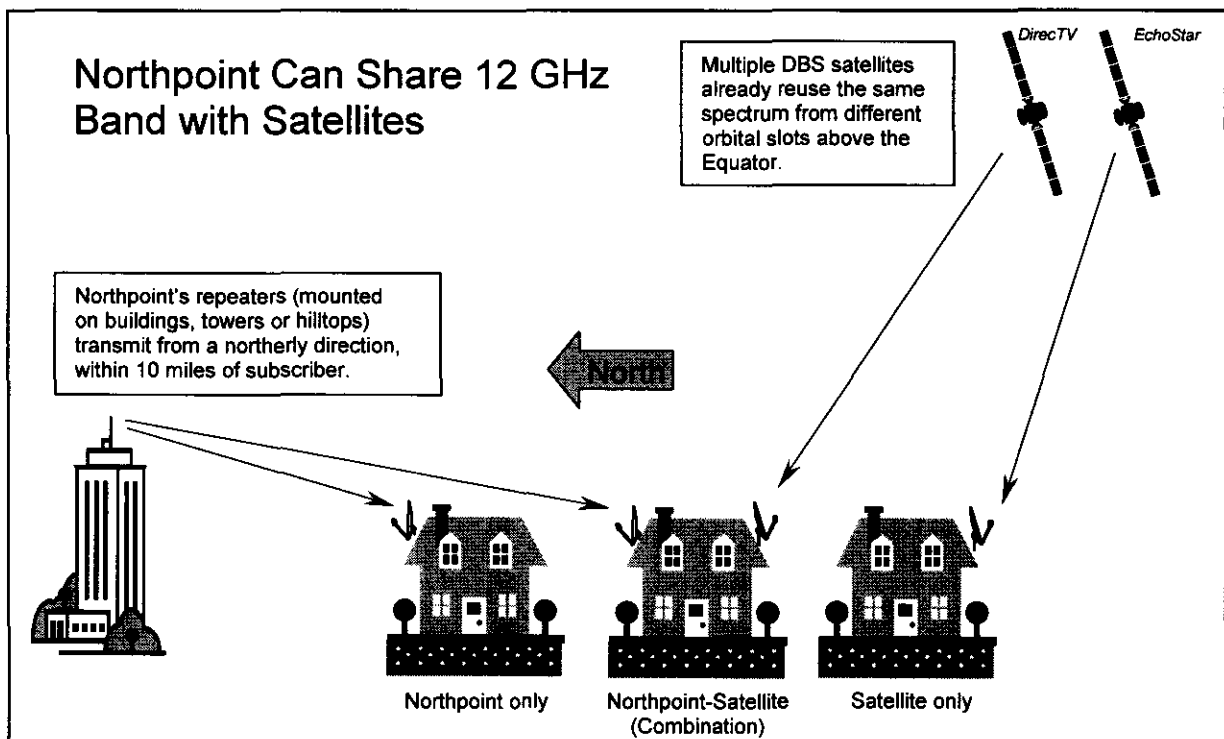
### **A Solution: Northpoint Technology**

Northpoint's business plan includes serving Native Americans as a major component. The local affiliate structure offers excellent business opportunities for Native Americans, and 3.4% of current Northpoint affiliate owners are Native Americans, including Wilma Mankiller, former Principal Chief of the Cherokee Nation. Through relatively inexpensive transmitters and repeaters, Northpoint will be able to serve Native American reservation communities with low population densities at a low cost, without government subsidy.

# Northpoint Technology

## Bringing New Competitive Services to Consumers

Northpoint is a revolutionary, low-cost wireless technology that can be deployed rapidly to consumers throughout the entire United States. The patented system employs a series of low-power, ground-based microwave repeaters that operate in the same spectrum band as satellites. Northpoint subscribers would use the same type of set-top box and reception dish used for DBS.



### Services Northpoint Will Offer:

- **Access to Local Channels** – Northpoint will carry all local TV channels in all 210 local television markets. (DBS fails to provide local service to 80% of the local markets.)
- **Emergency Alert System** – Unlike DBS, Northpoint will ensure that viewers are presented with vital EAS alerts, regardless of what channel is being viewed.
- **High Speed Internet** – In addition to video programming, Northpoint's digital system will offer broadband access to the Internet, reaching geographic areas not served by cable or DSL.
- **Robust Competition** – Incumbents will be forced to lower their prices and improve their services to compete with Northpoint's monthly rates of \$20 for 96 video channels and \$20 for high-speed Internet service.

## CERTIFICATE OF SERVICE

I, Shonn Dyer, hereby certify that on this 6th day of March, 2002, copies of the foregoing were served by hand delivery\* and/or first class United States mail, postage prepaid, on the following:

William F. Caton\*  
Acting Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Room TW-B204  
Washington, D.C. 20554

Carolyn Conyers, Confidential Assistant\*  
Office of Commissioner Copps  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

Antoinette Cook Bush  
Northpoint Technology, Ltd.  
444 North Capitol Street, N.W.  
Suite 645  
Washington, D.C. 20001

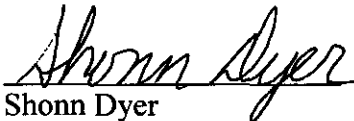
Tony Lin  
David C. Oxenford  
Shaw Pittman  
2300 N. Street, NW  
Washington, D.C. 20037

Nathaniel J. Hardy  
Irwin, Campbell & Tannewald, PC  
1730 Rhode Island Avenue, NW  
Suite 200  
Washington, D.C. 20036

James H. Barker, III  
Latham & Watkins  
1001 Pennsylvania Ave., NW  
Suite 1300  
Washington, D.C. 20004-2505

Pantelis Michalopoulos  
Rhonda M. Bolton  
Steptoe & Johnson LLP  
1330 Connecticut Avenue, NW  
Washington, D.C. 20036

Nancy K. Spooner  
Swidler Berlin Shereff Friedman, LLP  
The Washington Harbor  
3000 K Street N.W., Suite 300  
Washington, D.C. 20007-5116

  
Shonn Dyer